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CLAIMS:

1. A method to optimize energy consumption in a hearing device in which one of several hearing programs can be
5 selected, the method comprising the steps of

- receiving information regarding a selected hearing program,

- adjusting a clock frequency of a clock signal driving processing units of the hearing device,

10 wherein knowledge of computing power needed by the selected hearing program is taken into account for adjusting the clock frequency.

2. The method of claim 1, further comprising the step of

15 - adjusting a supply voltage supplying processing units with energy in the hearing device,

wherein the knowledge of computing power needed by the selected hearing program is taken into account for adjusting the supply voltage.

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3. The method of claim 2, further comprising the step of generating the supply voltage from a battery voltage that is higher than the supply voltage.

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4. The method of claim 2, further comprising the step of generating a memory supply voltage from a battery voltage that is lower than the memory supply voltage.

5 5. The method of claim 2, further comprising the step of either generating the supply voltage or the memory supply voltage from the battery voltage at any point in time.

10 6. The method of claim 2, further comprising the step of using a charge storing device, particularly at least one capacitor, to generate the supply voltage and/or a memory supply voltage.

15 7. The method of claim 6, further comprising the step of using the same capacitor or capacitors, respectively, to generate the supply voltage as well as the memory supply voltage.

20 8. The method of one of the claims 1 to 7, further comprising the step of generating essentially a 50%-duty cycle for the clock signal.

25 9. A method to optimize energy consumption in a hearing device in which one of several hearing programs can be selected, the method comprising the steps of

- receiving information regarding a selected hearing program,

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- adjusting a supply voltage supplying processing units with energy in the hearing device,

wherein knowledge of computing power needed by the selected hearing program is taken into account for adjusting the supply voltage.

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10. The method of claim 9, further comprising the step of

- adjusting a clock frequency of a clock signal driving processing units of the hearing device,

10 wherein knowledge of computing power needed by the selected hearing program is taken into account for adjusting the clock frequency.

11. The method of claim 9, further comprising the step of generating the supply voltage from a battery voltage that is higher than the supply voltage.

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12. The method of claim 9, further comprising the step of generating a memory supply voltage from a battery voltage that is lower than the memory supply voltage.

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13. The method of claim 9, further comprising the step of either generating the supply voltage or the memory supply voltage from the battery voltage at any point in time.

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14. The method of claim 9, further comprising the step of using a charge storing device, particularly at least one capacitor, to generate the supply voltage and/or a memory supply voltage.

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15. The method of claim 14, further comprising the step of using the same capacitor or capacitors, respectively, to generate the supply voltage as well as the memory supply voltage.

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16. The method of one of the claims 9 to 15, further comprising the step of generating essentially a 50%-duty cycle for the clock signal.

15 17. A hearing device comprising

- a processing unit driven by a clock signal,
- a control unit,
- an oscillator unit,

20 whereas the control unit is operatively connected to the oscillator unit which is operatively connected to the processing unit, wherein the clock signal generated by the oscillator unit is adjustable by the control unit via the oscillator unit by taking into account knowledge of computing power needed by a selected hearing program.

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18. The hearing device of claim 17, wherein the control unit is operatively connected to the source unit, and wherein a supply voltage to supply the processing unit with energy is adjustable by the control unit via the source
5 unit by taking into account knowledge of computing power needed by a selected hearing program.

19. The hearing device of claim 18, wherein a voltage converter is provided in the source unit, the voltage
10 converter being able to generate the supply voltage as well as a memory supply voltage whereas the supply voltage is lower than a battery voltage and the memory supply voltage is higher than the battery voltage.

15 20. The hearing device of claim 19, wherein the voltage converter is able to either generate the supply voltage or the memory supply voltage at any point in time.

21. The hearing device of claim 20, wherein a charge
20 storing device, in particular at least one capacitor, is operatively connected to the voltage converter.

22. The hearing device of claim 21, wherein the same charge
25 storing device is used to generate the supply voltage as well as the memory supply voltage.

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23. The hearing device of one of the claims 17 to 22, wherein essentially a 50%-duty cycle for the clock signal is generate-able in the oscillator unit.

5 24. A hearing device comprising

- a processing unit for processing acoustic signals,
- a control unit,
- a source unit generating a supply voltage,

10 whereas the control unit is operatively connected to the source unit which is operatively connected to the processing unit, wherein the supply voltage generated by the source unit is adjustable by the control unit via the source unit by taking into account knowledge of computing power needed by a selected hearing program.

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25. The hearing device of claim 24, wherein an oscillator unit is provided, wherein the control unit is operatively connected to the oscillator unit and wherein the clock signal generated by the oscillator unit is adjustable by
20 the control unit via the oscillator unit by taking into account the knowledge of computing power needed by a selected hearing program.

26. The hearing device of claim 24, wherein a voltage
25 converter is provided in the source unit, the voltage converter being able to generate the supply voltage as well as a memory supply voltage, whereas the supply voltage is

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lower than a battery voltage and the memory supply voltage is higher than the battery voltage.

27. The hearing device of claim 26, wherein the voltage
5 converter is able to either generate the supply voltage or the memory supply voltage at any point in time.

28. The hearing device of claim 27, wherein a charge
storing device, in particular at least one capacitor, is
10 operatively connected to the voltage converter.

29. The hearing device of claim 28, wherein the same charge
storing device is used to generate the supply voltage as
well as the memory supply voltage.
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30. The hearing device of one of the claims 24 to 29,
wherein essentially a 50%-duty cycle for the clock signal
is generate-able in the oscillator unit.